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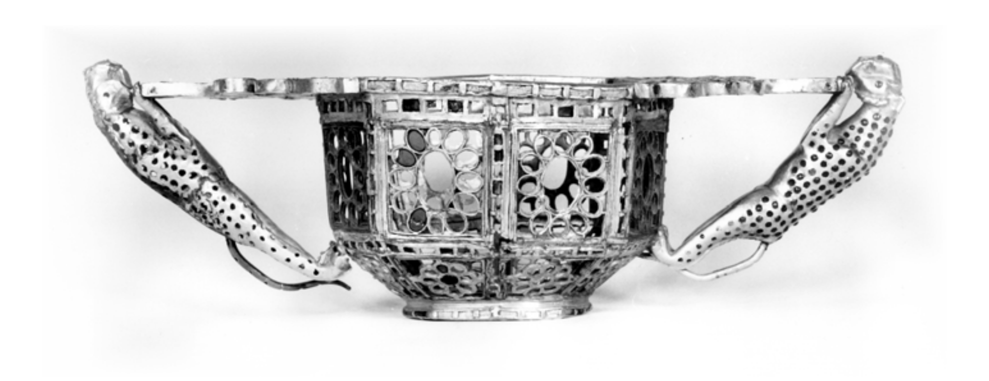
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BETWEEN THE STEPPE AND THE EMPIRE

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Archeological Studies in honour of Radu Harhoiu at 65th Anniversary

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AXE-LIKE IRON BARS IN THE EARLY MIDDLE AGES FROM CENTRAL AND NORTHERN EUROPE. SOME COMMENTS

Bartłomiej Sz. Szmoniewski

The iron bars found in Central Europe and Northern Europe make up an important element of material culture in the Early Middle Ages. Recent discoveries have provoked further examination into this category of iron objects.

The iron bars dating to the Early Middle Ages are mainly known as coming from three distinct areas. The first of these takes in the Great Moravian zone. The second is limited to the upper Vistula's tributary (Lesser Poland) and the third covers Southern Norway. The specimens of the axe-like iron bars are also represented in Denmark and Slovenia. The recent finds from Denmark are known from Snorup and the Dankirke settlement at Ribe in South-West Jutland dated between 260-450 A.D.[1]. A single iron bar was found in the iron tools deposit in the Ljublanec River in Slovenia[2].

The presented artefacts have been analyzed by many scholars from Germany[3], Slovakia[4], Poland[5] and Norway[6]. Recently, Darina Bialeková diveded the central European iron bars into four types (*Pl. 1*).

Iron axe-like bars from Great Moravia

Great Moravia and the second state after the so-called Realm of Samon (Samo reigned for thirty five years from 623/4)[7] was a particular phenomenon. The beginnings of Great Moravia date back to the time when Mojmir I (820-46) united the tribal centres, namely the Principalities of Nitra and Moravia, in the year 833 and it increased in importance in Central Europe during the reign of Svatopluk (871-94). It was then that it's greatest, though brief expansion occurred, reaching out beyond the previous area that had been limited to the catchment basin of the rivers Morava, Dyia, Wag, Nitra and Hron. A large state body was founded which was named Magna Morava by Constantine Porphyrogenitus. The decline of Great Moravia is associated with the Franks who 'in a series of invasions, with the help of the Hungarians, physically destroyed the core of the kingdom, the principality of Moravia'[8]. Great Moravia can be seen as a combination of various cultural phenomena which is difficult to define.

The iron bars from Great Moravia have been found in various circumstances as hoards/deposits, straight finds and grave goods as well[9]. For example in a stronghold at Pobedim 22 deposits have been discovered and consisted of 1251 preserved bars and 117 broken[10]. Another interesting place where large numbers of iron bars have been found is the stronghold at Mikulčice where from 1955 to 1975, 273 pieces were discovered[11]. The biggest single deposit was at Hràdek near the Wag river. It consisted of 247 axe-shaped bars (65kg)[12].

Karl Ohlhaver carried out pioneering work in the study of iron bars from Stáre Město by grouping various axe-like bars in typological series and giving them the name (Äxteformige Eisenbarren). He interpreted these finds as raw iron as well as currency[13]. Vilém Hruby deduced from the distribution of iron bars that they could be agricultural tools, used for cutting clay[14]. Jiři Sejbal criticized Hruby's concept and

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[1] Voss 1993, p. 97–111; Jarl Hansen, p. 15–23.
[2] Knific 2004, p. 191–195, Sl. 2.1, sl. 3.
[3] Olhaver 1939, p. 119–121.
[4] Bialeková 1990, p. 99–119; Bialeková 2000, p. 201–202; Béreš 2002, p. 137–148.
[5] Adamczyk 2004; Rozmus, Szmoniewski, Troncik 2007, p. 101–113.
[6] Resi 1995, p. 131–146.
[7] Curta 2001, p. 109.
[8] Boba 1971, p. 5.
[9] Bialeková 1990, p. 99–110.
[10] Kučerovská 1989, p. 19–53.
[11] Bialeková, Tirápaková, 1989, p. 89–94.
[12] Adamczyk 2004, p. 214.
[13] Ohlhaver 1939, p. 119–121.
[14] Hruby 1955.

noticed that the iron axe-like bars from the graves are Charon's Obol[15]. Many of Ohlhaver's ideas were followed by Radomir Pleiner. He interpreted the objects seen as raw materials to be secondarily used as primitive money in non-monetary transactions[16]. The idea of the ritual/magical meaning of the iron bars played an important role in Bohumil Novotný's theory. He analyzed materials from Great Moravia and Norway. According to him iron bars were the ritual equivalents/imitations of the agriculture tools used as axes or iron ploughs[17]. The most significant treatment of this topic is the study by Darina Bialeková [18] completed in the paper done with Vladimir Turčan in 2007[19].

Vistulans

Vistulans (Wislane) were a tribe inhabiting present day Lesser Poland (Małopolska) around 800 who created a tribal union. The heart of the Vistulans land was Kraków with the Wawel Hill and fortified suburbium Okół[20]. Other important places were strongholds in Stradów Wiślica and probably Sandomierz[21]. Vistulans (Uislane) are mentioned in Bavarian Geographer (Geographus Bavarus)[22], in Alfred's anglo-saxon version of Orosius' Historiae adversum paganos (Visle lond)[23] and in the most important historical source Vita Methodii, known as the Panonnian Legend or the Moravian Legend. According to the Vita Methodii, the Vistulans in southern Poland were ruled by a mighty pagan prince "who did much harm to the Christians" and "who lived on Wislech" [Wistula River][24]. It has been suggested that the polity of the Vistulans may have been in an advanced process of power centralisation.

Geographic distribution of the Lesser Polish axe-like bars is confined mainly to the upper Vistula basin with a concentration in the area of Cracow. The iron axe bars have been found in seven places in Southern Poland, five of them as hoards/deposits[25]. Two items were found as single axe bars on the surface of the stronghold at Stradów (Great Moravian type)[26] and in a settlement at Cracow - Nowa Huta (Małopolska type)[27].

The iron bars that were first discovered at the stronghold at Zawada Lanckorońska (near Dunajec River) were analysed by Andrzej Żaki. He linked this find to Great Moravia and interpreted it as raw materials[28]. Then Janusz Sztetyłło emphasized the evolution of the axe-shaped iron bars from an axe. In his opinion the analysed artefacts were a currency in a local non-monetary economy [29]. After Sztetyłło's papers, nothing of significance was published about the axe-shaped iron bars for over ten years, until the significant discoveries in Cracow. In 1979 in the Early Medieval suburbium Okół at Cracow (Kanonicza 13 Street) one of the biggest European axe-like iron bar deposits was found. The "hoard" comprises just over 3630 kg of iron in the form of at least 4212 axe-shape iron bars. Emil Zaitz emphasised the non-economical value of these items in the Vistulan community and placed Cracow as a center of iron importation/exportation from/to the south[30]. Krzysztof Wachowski offers an alternative explanation. According to him the appearance of iron bar deposits in Lesser Poland and Great Moravia was connected with the Vikings. They migrated from the Baltic Sea Coast to Great Moravia and brought the idea of iron bars[31].

Axe-like Iron bars from Norway

The iron bar deposits from Norway are dated to the Late Iron Age [32] and Viking Period[33]. In the period from around 200 to 900 AD typical social organization in Norway would have been a courtyard site. It was a

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[15] Sejbal, 1960, p. 73–82.
[16] Pleiner 1961, p. 405–450.
[17] Nowotný, 1973, p. 275–280.
[18] Bialeková 1990, p. 99–119.
[19] Bialeková, Turčan, p. 151–158.
[20] Radwański 2000, p. 535–555.
[21] Buko 2000, 146–149; Discution 2008, p. 86–89.
[22] Łowmiański, 1958, s. 1–22; Łowmiański 1955, p. 9–58; Nazarenko 2001, p. 52–70.
[23] Sweet 1983, p. 16; Labuda 1961, p. 66; Lenderski 1964, p. 341–439.
[24] *"jazyčeskim knjazem, sidevšim v "Visleh", kotoryj voeval s Velikoj Moraviej, no zatem poterpel poraženie i byl kreščen "nasil'no na čužoj zemle"*. Vita Methodii XI, 2–3; Mikós 1992, p. 6; Łowmiański 1973, p. 441–443.
[25] Rozmus, Szmoniewski, Troncik 2007 p. 108, Fig. 6.
[26] Gajewski 1965, p. 83; Dąbrowska 1965, p. 265, Fig. 57.
[27] Hachulska-Ledwos 1971, p. 14.
[28] Żaki 1964, p. 145–147.
[29] Sztetyłło 1961, p. 779–793; J. Sztetyłło, 1979, pp. 271–276.
[30] Zaitz, 1981, p. 97–122; Zaitz 1988, p. 261–276; Zaitz 1991, p. 142–178; Zaitz, 2006, p. 220–272.
[31] Wachowski 1981, p. 129–135.
[32] Merovingan (Merovingertid) period ca. 560/570–800 A.D. age see: Jørgensen, Solberg 2000, p. 181–184, Fig. 54.
[33] Vikingtiden ca. 800–1030 see Jørgensen, Solberg 2000, p. 218–219.

complex of houses around a courtyard the functions of which may have been religious, judicial and military. In the late 9th century these places were abandoned in connection with the King's integration of the state[34].

In present day Norway iron bar deposits are known from circa 80 places and have been found with their stone context (near, or under), in grazing and wooded areas. Most of them have been discovered without archaeologically datable context[35]. The concentration in three main areas has been observed: Oppland (Toten and Hadeland), Hedmark (Hedemarfken east of Mjosa) and Buskerund (Ringerike). One of the biggest deposits was discovered in Nordre Bjerke in Gran Oppland. The finds consist of over 77 kg of iron (568 bars). Only 13 of them are completely preserved[36].

In 1885 Oluf Rygh interpreted axe-like iron bars found in Norway as a loom weights or instruments of unknown function[37]. The most significant treatment of the topic is the study by Jan Petersen who collected the majority of available iron bars and proposed a schema of their evolution, typology and chronology as well. T. Dannevig Hauge in his fundamental book *Blesterbruk og Myrjern* analysed iron production in South-eastern Norway. This book contains much useful information on the history of iron production in Norway in the Middle Ages, drawings and descriptions of excavated furnaces and metalographical analyses[38]. The iron bar deposits were also analyzed by Irmelin Martens. In her opinion the bar forms developed from a tool to a standardized form of currency bar [39]. Recently Heid Gjøstein Resi published a paper in which she discussed the new discovery of iron bar deposits at Gran in Oppland [40].

Chronology

The iron bars from Scandinavia have a lower limit chronologically. The oldest finds should probably be assigned to the Pre-Roman Iron Age[41]. The oldest finds from Central Europe are from the Principality of Nitra and Moravia can be dated from the 8th AD. In the Upper Vistula river iron axe-like bar finds are the youngest and can be dated to the first half of the 9th century, and especially to the second half[42]. The upper limit of their chronology closed the finds from Norway. I have mentioned that in Erik Magnussøn's law amendment of 1282 there is information about two sorts of iron: Trønder iron and Valdres iron. The Tønder iron – spade like iron bars known from Trøndelag and, the Valdres iron – axe like pieces known from Valdres[43].

On the contrary, Central European iron axe-like bars were used up to the beginning of the 10th century AD[44].

Discussion

The question of the origin of axe-like bars, especially Central European variants of these artifacts, is controversial. On one hand it has been pointed out that they emerged as a result of contact between Great Moravia and Northern Europe where the concept was borrowed from[45]. According to Krzysztof Wachowski, the Cracow depot, the biggest in Europe, indicates that Cracow - due to its location – was an intermediate post on the Norman-Moravian trading route, connecting Early Medieval iron production centres in Scandinavia and Moravia. With imports of iron the concept of iron axe-like bars was adopted in Central Europe[46]. According to another theory Norman elements did not play any role in the genesis of Central European axe-like bars and artifacts of this type developed independently on both territories which had comparable economic development[47].

The idea of the iron axe-like bars as a Norman influence among the Slavs should be reconsidered. There are two possible remains which might indicate contacts. Leszek P. Słupecki emphasized the similarities between the construction of the mythical Prince Krak's large burial mound in Cracow with the

[34] Olsen 2005, p. 319–356; Myhre 2003, p. 81–102.
[35] Resi 1995, p. 137, Fig. 3.
[36] Resi 1995, p. 131, Fig. 1–2.
[37] O. Rygh 1985a, p. 20: 438; Rygh 1985, p. 66.
[38] Dannevig Hauge 1946.
[39] Martens, Rosenqvist 1988.
[40] Resi 1995.
[41] Resi 1995, p. 131, 134–135, Ft. 3.
[42] Adamczyk 2004, p. 215.
[43] *Norges Gamle Love indtil 1387. Tridie Bind. Lovgivningen efter Kong Magnus Haakonssöns Död 1280 indtil 1387, Christiania*, p. 14; see also Dannevig Hauge 1946, p. 89. I would like thank to dr. Jonas Wellendorf for his translation of this fragment.
[44] Adamczyk 2004, p. 215.
[45] Adamczyk 2004, p. 221.
[46] Wachowski 1981, p. 172–173. K. Ohlhaver was first who payed attention to Scandinavia as a possible place of the iron axe-like bars origins (Ohlhaver 1939, p. 122), see also Pošvář 1963, p. 142.
[47] Adamczyk 2004, p. 222.

large burial mounds from Scandinavia, particularly from Jelling[48]. The monumental Mounds of Cracow are a specific element of the tribal landscape [49] as well as the recent discoveries of the iron axe-like bars with the ring-shaped eyelet from the territories of the Great Moravian State. According to Darina Bialeková and Vladimír Turčan these items are similar to finds from Scandinavia and might be a trace of the possible contact between Slav populations and Normans[50].

Could axe-shaped bar from Poland and Great Moravia be interpreted as a transition of an idea from Scandinavia? In my opinion, the answer is still under debate. It is an open question that the similarity of axe-shaped iron bars from Great Moravia and Norway could result from cultural convergence or transition of the idea. Future discoveries will show which explanation was veritable.

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[48] Słupecki 2004, p. 138; Słupecki, 2005, p. 88.
[49] Radwański 2002, p. 5–23.
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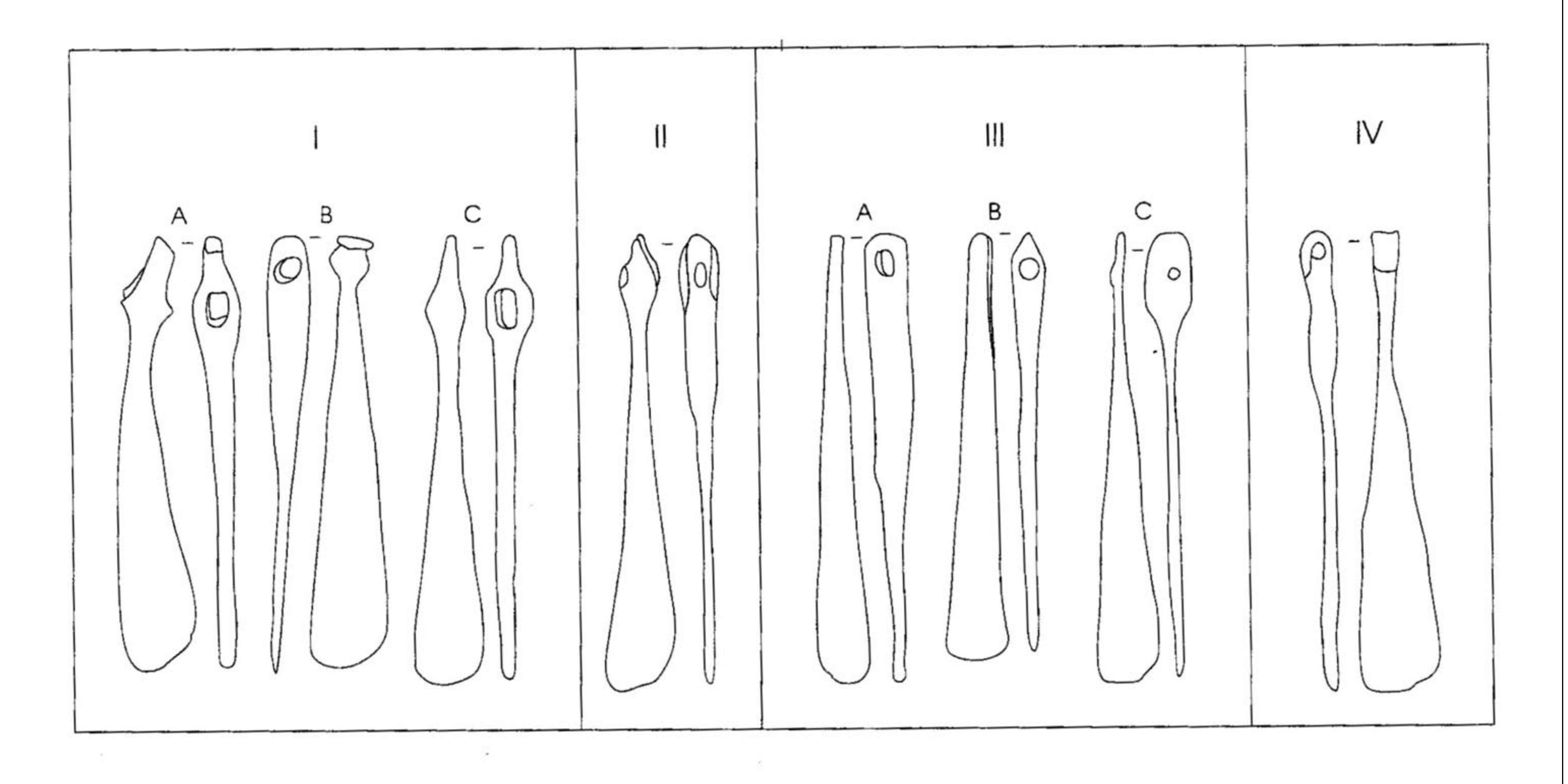
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Plate:

Pl. 1. Four types of iron axe-like bars from Central Europe (according to D. Bialeková 1990, Fig.2; D. Bialeková, V. Turčan 2007, Fig. 9).



Pl. 1. Four types of iron axe-like bars from Central Europe.